

Claims

- [c1] A current collector for an electrochemical device of the type that includes an ionically conductive electrolyte layer for gas generating, the invention comprising:
- the current collector layer having a high electrical conductivity and being porous to desired gas generated by the electrochemical device; and,
 - the current collector layer being substantially formed as a film comprised of a layer of spherical refractory material objects having a conductive coating of a precious metal.
- [c2] The invention of claim [Claim Reference] wherein the precious metal is selected from the group consisting of silver, palladium, gold, or platinum, or alloys of these metals with other metals.
- [c3] The invention of claim [Claim Reference] wherein the refractory material is a ceramic.
- [c4] The invention of claim [Claim Reference] wherein the refractory material is selected from the group consisting of zirconia, alumina, ceria, or perovskite.
- [c5] A metal coated element for forming a current collector for an electrochemical device of the type that includes an ionically conductive electrolyte layer for gas generating, the invention comprising:
- spherical refractory material objects having a conductive coating of a precious metal; and the coated spherical objects having a desired diameter suitable for forming into a film;
- whereby the coated spherical objects can be formed into a current conducting film.
- [c6] The invention of claim [Claim Reference] wherein the precious metal is selected from the group consisting of silver, palladium, gold, or platinum, or alloys of these metals with other metals.
- [c7] The invention of claim [Claim Reference] wherein the refractory material is a ceramic.

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